

Corn Herbicide Showcase with Atrazine

Janesville, WI 2023

Trial Information

Trial Sponsor(s): BASF, Corteva, FMC Summit Agro, Syngenta

Objective: Evaluate multiple 1- and 2-pass corn herbicide programs containing atrazine for giant ragweed control and crop safety

Crop: Corn

Hybrid: DKC50-87 RIB

Weed species (pressure): Giant ragweed (high-very high)

Herbicide Application(s): PRE – 5/4
EPOST – 5/25 (V2 corn)
POST – 6/2 (V4 corn)

For the full report see trial #23-ROK-CN02 in the [2023 Wisconsin Weed Science Research Report](#)



We create chemistry

Corn Herbicide Showcase: Atrazine (Janesville, WI 2023)

Trt #	Herbicide (rate acre ⁻¹)	Injury (%)		Giant Ragweed (%)				Yield ^b bu acre
		6/2	6/15	5/25	6/2	6/15	10/17	
1	Check Untreated	0	0	0	0	0	0	37 c
	One-Pass – PRE (5/4)							
2	Resicore XL (2.8 qt)	1.5	0	95	61	58	51	107 b
	One-Pass – EPOST (5/25)							
3	Resicore XL (2 qt) + atrazine 4L (1 pt) + Roundup PM3 (32 oz) + COC (1% v/v) + AMS ^c	10.0	4.3	0	81	89	84	208 a
4	Anthem Maxx (4 oz) + Callisto (3 oz) + atrazine (2 pt) + Roundup PM3 (30 oz) + NIS (0.25% v/v) + AMS ^c	2.3	1.3	0	80	85	79	194 a
	Two-Pass – PRE (5/4) <i>fb</i> POST (6/2)							
5	Resicore XL (2 qt) <i>fb</i> Kyro (45 oz) + atrazine 4L (1 pt) + Roundup PM3 (32 oz) + COC (1% v/v) + AMS ^c	2.8	6.0	84	55	87	82	202 a
6	Surpass NXT (2 pt) + atrazine 4L (2 pt) <i>fb</i> Resicore XL (1.4 qt) + atrazine 4L (1 pt) + Roundup PM3 (32 oz) + COC (1% v/v) + AMS ^c	2.0	8.0	82	41	87	83	197 a
7	Verdict (16 oz) <i>fb</i> Armezon PRO (16 oz) + atrazine 4L (1 pt) + Roundup PM3 (15 oz) + AMS ^c	1.8	2.0	94	67	89	85	195 a
8	Verdict (10 oz) + Callisto (3 oz) <i>fb</i> Armezon PRO (16 oz) + atrazine 4L (1 pt) + Roundup PM3 (15 oz) + AMS ^c	2.3	2.0	89	62	87	85	197 a
9	Anthem Maxx (4 oz) + Callisto (5 oz) + atrazine 4L (2 pt) <i>fb</i> Roundup PM3 (30 oz) + Status (5 oz) + NIS (0.25% v/v) + AMS ^c	2.3	0.5	85	55	89	85	199 a
10	Lumax EZ (1.5 qt) <i>fb</i> Acuron GT (3.75 pt) + atrazine 4L (1 pt) + NIS (0.25% v/v) + AMS ^c	1.0	3.0	61	24	88	85	196 a
11	Acuron (1.5 qt) <i>fb</i> Halex GT (3.6 pt) + Status (2.5 oz) + atrazine 4L (1 pt) + NIS (0.25% v/v) + AMS ^c	3.3	3.3	83	60	91	94	214 a
		LSD ($\alpha=0.10$)	1.5	1.5	6	19	15	11
		p value	<.001	<.001	<.001	<.001	0.029	<.001
								25
								<0.001

^aVisual control from 70-100% is illustrated on a color scale with green representing greater weed control values.

^bYield values with the same letter are not significantly different.

^cLiquid AMS (AMSOL) applied at 2.5% v/v

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Plot pictures taken on 5/25
21 days after the PRE application

The number in the upper right-hand corner is the average % giant ragweed control of 4 replications

21 days after PRE (5/25)

Untreated Check

0%



21 days after PRE (5/25)

PRE: 2.8 qt Resicore XL

95%



21 days after PRE (5/25)

PRE: 2 qt Resicore XL

84%



21 days after PRE (5/25)

PRE: 2 pt Surpass NXT + 2 pt atrazine 4L

82%



21 days after PRE (5/25)

PRE: 16 fl oz Verdict

94%



21 days after PRE (5/25)

PRE: 10 fl oz Verdict + 3 fl oz Callisto

89%



21 days after PRE (5/25)

PRE: 4 fl oz Anthem Maxx+ 5 fl oz Callisto + 2 pt atrazine 4L

85%



21 days after PRE (5/25)

PRE: 1.5 qt Lumax EZ

61%



21 days after PRE (5/25)

PRE: 1.5 qt Acuron

83%



Corn Herbicide Showcase with Atrazine Janesville, WI 2023

Plot pictures taken on 6/2

29 days after the PRE application

8 days after the EPOST application

The day of the POST application

The number in the upper right-hand corner is the average % giant ragweed control of 4 replications

29 days after PRE (6/2)
Untreated Check

0%



**29 days after PRE (6/2)
PRE: 2.8 qt Resicore XL**

61%



8 days after EPOST (6/2)

EPOST: 2 qt Resicore XL + 1 pt atrazine + 32 oz Roundup PM3 + COC + AMS

81%



8 days after EPOST (6/2)

**EPOST: 4 fl oz Anthem Maxx + 3 fl oz Callisto + 2 pt atrazine +
30 fl oz Roundup PM3 + NIS + AMS**

80%



**29 days after PRE (6/2)
PRE: 2 qt Resicore XL**

55%



29 days after PRE (6/2)

PRE: 2 pt Surpass NXT + 2 pt atrazine 4L

41%



**29 days after PRE (6/2)
PRE: 16 fl oz Verdict**

67%



29 days after PRE (6/2)

PRE: 10 fl oz Verdict + 3 fl oz Callisto

62%



29 days after PRE (6/2)
PRE: 4 fl oz Anthem Maxx+ 5 fl oz Callisto + 2 pt atrazine 4L

55%



29 days after PRE (6/2)
PRE: 1.5 qt Lumax EZ

24%



**29 days after PRE (6/2)
PRE: 1.5 qt Acuron**

60%



Corn Herbicide Showcase with Atrazine Janesville, WI 2023

Plot pictures taken on 6/15

42 days after the PRE application

21 days after the EPOST application

13 days after the POST application

The number in the upper right-hand corner is the average % giant ragweed control of 4 replications

42 days after PRE (6/15)

Untreated Check

0%



42 days after PRE (6/15)

PRE: 2.8 qt Resicore XL

58%



21 days after EPOST (6/15)
EPOST: 2 qt Resicore XL + 1 pt atrazine + 32 oz Roundup PM3 + COC + AMS 89%



21 days after EPOST (6/15)

EPOST: 4 oz Anthem Maxx + 3 oz Callisto + 2 pt atrazine +
30 oz Roundup PM3 + NIS + AMS

85%



13 days after POST (6/15)

PRE: 2 qt Resicore XL *fb*

POST: 45 oz Kyro + 1 pt Atrazine 4L + 32 oz Roundup PM3 + COC + AMS

87%



13 days after POST (6/15)

PRE: 2 pt Surpass NXT + 2 pt atrazine 4L *fb*

POST: 1.4 qt Resicore XL + 1 pt atrazine + 32 oz Roundup PM3 + COC + AMS

87%



13 days after POST (6/15)

PRE: 16 fl oz Verdict *fb*

POST: 16 oz Armezon PRO + 1 pt atrazine + 15 oz Roundup PM3 + AMS

87%



13 days after POST (6/15)

PRE: 10 fl oz Verdict + 3 fl oz Callisto *fb*

POST: 16 oz Armezon PRO + 1 pt atrazine + 15 oz Roundup PM3 + AMS

87%



13 days after POST (6/15)

PRE: 4 fl oz Anthem Maxx+ 5 fl oz Callisto + 2 pt atrazine 4L *fb*

POST: 30 oz Roundup PM3 + 5 oz Status + NIS + AMS

89%



13 days after POST (6/15)

PRE: 1.5 qt Lumax EZ fb

POST: 3.75 pt Acuron GT + 1 pt atrazine + NIS + AMS

88%



13 days after POST (6/15)

PRE: 1.5 qt Acuron *fb*

POST: 3.6 pt Halex GT + 2.5 oz Status + 1 pt atrazine + NIS + AMS

91%



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Plot pictures taken on 10/17
Day of corn harvest

The number in the upper right-hand corner is the average % giant ragweed control of 4 replications



@Harvest (10/17)
PRE: 2.8 qt Resicore XL

51%



@Harvest (10/17)

84%

EPOST: 2 qt Resicore XL + 1 pt atrazine + 32 oz Roundup PM3 + COC + AMS



@Harvest (10/17)

EPOST: 4 oz Anthem Maxx + 3 oz Callisto + 2 pt atrazine +
30 oz Roundup PM3 + NIS + AMS

79%



@Harvest (10/17)

PRE: 2 qt Resicore XL *fb*

82%

POST: 45 oz Kyro + 1 pt Atrazine 4L + 32 oz Roundup PM3 + COC + AMS



@Harvest (10/17)

PRE: 2 pt Surpass NXT + 2 pt atrazine 4L fb

83%

POST: 1.4 qt Resicore XL + 1 pt atrazine + 32 oz Roundup PM3 + COC + AMS



@Harvest (10/17)

PRE: 16 fl oz Verdict *fb*

POST: 16 oz Armezon PRO + 1 pt atrazine + 15 oz Roundup PM3 + AMS

85%



@Harvest (10/17)

PRE: 10 fl oz Verdict + 3 fl oz Callisto *fb*

85%

POST: 16 oz Armezon PRO + 1 pt atrazine + 15 oz Roundup PM3 + AMS



@Harvest (10/17)

PRE: 4 fl oz Anthem Maxx+ 5 fl oz Callisto + 2 pt atrazine 4L *fb*

85%

POST: 30 oz Roundup PM3 + 5 oz Status + NIS + AMS



@Harvest (10/17)

PRE: 1.5 qt Lumax EZ fb

POST: 3.75 pt Acuron GT + 1 pt atrazine + NIS + AMS

85%



@Harvest (10/17)

PRE: 1.5 qt Acuron *fb*

POST: 3.6 pt Halex GT + 2.5 oz Status + 1 pt atrazine + NIS + AMS

94%

